

Abstract

A communications service provider provides wireless access to a packetized data network, such as the Internet. The service provider includes a server computer. The server computer is connected to the network, which is at least in part a wired network. The wired network is connected to a cellular wireless communications system. Features of the network and the server computer include group messaging, co-processors, dynamic protocol dictionaries, and cache synchronization and optimization. The features speed and improve communications over the network, including over wireless channels and dynamic conditions of those channels.